

1 26. A method as recited in claim 21, further comprising:

2 presenting results of the querying in a simple tabular display.

1 27. A method as recited in claim 7, further comprising:

2 converting location reference data stored by a traditional linear referencing
3 method to an anchor linear referencing method as a collection of anchor sections and
4 intersections that represent the roadways, the converted data for use with the road
5 network comprised of anchor sections integrated with linear data.

1 28. A transportation information system, comprising:

2 at least one computing device having storage for data and computer code and
3 capable of executing object oriented computer code;

4 a current data repository for storing current transportation network data and
5 linear event data;

6 an historical data repository for storing historical transportation network data
7 and linear event data;

8 a current data query program comprising computer code for querying the
9 current data repository;

10 an historical data query program comprising computer code for querying the
11 historical data repository;

12 a report generator comprising computer code for generating reports using data
13 retrieved during a querying of a data repository;

14 a maintenance process comprising computer code for maintaining data in the
15 historical data repository;
16 an anchor linear referencing system (LRS), the LRS having a collection of
17 anchor sections, intersections, and anchored linear events, an anchor section being a
18 defined data set representative of a linear portion of a transportation pathway, the
19 anchored linear events comprising a set of properties and attributes further defining
20 their qualities and relationships to elements in the transportation network, wherein the
21 data defined by the LRM comprises the network of transportation pathways, and
22 wherein intersections may be interior to an anchor section and defined by an offset
23 from an end of an anchor section.

1 29. A system as recited in claim 28, wherein at least one anchor section
2 connects two adjacent intersections.

1 30. A system as recited in claim 28, further comprising an optimized
2 repository for query data, the optimized repository being generated by the
3 maintenance process.

1 31. A system as recited in claim 28, wherein the computer code is object-
2 oriented.

1 32. A system as recited in claim 28, wherein attributes and properties are
2 associated with elements in the network and disjoint attributes of an anchor section
3 are enabled.

1 33. A system as recited in claim 28, where the transportation network is a
2 road network.

1 34. A system as recited in claim 28, where the transportation
2 network is for waterway shipping lanes.